



PCT

RAW SEQUENCE LISTING

DATE: 02/11/2003

PATENT APPLICATION: US/09/914,324A

TIME: 14:31:45

Input Set : A:\21044-46.app

Output Set: N:\CRF4\02112003\I914324A.raw

3 <110> APPLICANT: Conaway, Joan A.
 4 Conaway, Ronald C.
 5 Kamura, Takumi
 6 Oklamoma Medical Research Foundation
 8 <120> TITLE OF INVENTION: Novel Component of von Hippel-Lindau Tumor Suppressor
 9 Complex and SCF Ubiquitin Ligase
 11 <130> FILE REFERENCE: 021044-004600US
 13 <140> CURRENT APPLICATION NUMBER: US 09/914,324A
C--> 14 <141> CURRENT FILING DATE: 2003-02-11
 16 <150> PRIOR APPLICATION NUMBER: US 60/121,787
 17 <151> PRIOR FILING DATE: 1999-02-26
 19 <150> PRIOR APPLICATION NUMBER: WO PCT/US00/04838
 20 <151> PRIOR FILING DATE: 2000-02-25
 22 <160> NUMBER OF SEQ ID NOS: 12
 24 <170> SOFTWARE: PatentIn Ver. 2.1
 26 <210> SEQ ID NO: 1
 27 <211> LENGTH: 108
 28 <212> TYPE: PRT
 29 <213> ORGANISM: Homo sapiens
 31 <220> FEATURE:
 32 <223> OTHER INFORMATION: human ring box protein 1 (Rbx1)
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 35 Met Ala Ala Ala Met Asp Val Asp Thr Pro Ser Gly Thr Asn Ser Gly
 36 1 5 10 15
 38 Ala Gly Lys Lys Arg Phe Glu Val Lys Lys Trp Asn Ala Val Ala Leu
 39 20 25 30
 41 Trp Ala Trp Asp Ile Val Val Asp Asn Cys Ala Ile Cys Arg Asn His
 42 35 40 45
 44 Ile Met Asp Leu Cys Ile Glu Cys Gln Ala Asn Gln Ala Ser Ala Thr
 45 50 55 60
 47 Ser Glu Glu Cys Thr Val Ala Trp Gly Val Cys Asn His Ala Phe His
 48 65 70 75 80
 50 Phe His Cys Ile Ser Arg Trp Leu Lys Thr Arg Gln Val Cys Pro Leu
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 53 Asp Asn Arg Glu Trp Glu Phe Gln Lys Tyr Gly His
 54 100 105
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 58 <211> LENGTH: 121
 59 <212> TYPE: PRT
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 62 <220> FEATURE:
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 65 <400> SEQUENCE: 2

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66 Met Ser Asn Glu Val Asp Arg Met Asp Val Asp Glu Asp Glu Ser Gln
67 1 5 10 15
69 Asn Ile Ala Gln Ser Ser Asn Gln Ser Ala Pro Val Glu Thr Lys Lys
70 20 25 30
72 Lys Arg Phe Glu Ile Lys Lys Trp Thr Ala Val Ala Phe Trp Ser Trp
73 35 40 45
75 Asp Ile Ala Val Asp Asn Cys Ala Ile Cys Arg Asn His Ile Met Glu
76 50 55 60
78 Pro Cys Ile Glu Cys Gln Pro Lys Ala Met Thr Asp Thr Asp Asn Glu
79 65 70 75 80
81 Cys Val Ala Ala Trp Gly Val Cys Asn His Ala Phe His Leu His Cys
82 85 90 95
84 Ile Asn Lys Trp Ile Lys Thr Arg Asp Ala Cys Pro Leu Asp Asn Gln
85 100 105 110
87 Pro Trp Gln Leu Ala Arg Cys Gly Arg
88 115 120

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91 <210> SEQ ID NO: 3

92 <211> LENGTH: 508

93 <212> TYPE: DNA

94 <213> ORGANISM: Homo sapiens

96 <220> FEATURE:

97 <221> NAME/KEY: CDS

98 <222> LOCATION: (7)..(333)

99 <223> OTHER INFORMATION: Rbx1

101 <400> SEQUENCE: 3

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102 cccaaaatgg cggcagcgat ggatgtggat accccgagcg gcaccaacag cggcgcgggc 60
103 aagaagcgct ttgaagtga aaagtggaat gcagtagccc tctgggcctg ggatattgtg 120
104 gttgataact gtgccatctg caggaaccac attatggatc tttgcataga atgtcaagct 180
105 aaccaggcgt ccgctacttc agaagagtgt actgtcgcat ggggagctctg taaccatgct 240
106 tttcacttcc actgcatctc tcgctggctc aaaacacgac aggtgtgtcc attggacaac 300
107 agagagtggg aattccaaaa gtatgggcac taggaaaaga cttcttccat caagcttaat 360
108 tgttttggtt ttcatttaat tgactttccc tgctgttacc taattacaaa ttggatggaa 420
109 ctgtgttttt ttctgctttg ttttttcagt ttgctgtttc tgtagccata ttgtattctg 480
110 tgtcaaataa agtccagttg gattctgg

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113 <210> SEQ ID NO: 4

114 <211> LENGTH: 480

115 <212> TYPE: DNA

116 <213> ORGANISM: Saccharomyces cerevisiae

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119 <221> NAME/KEY: CDS

120 <222> LOCATION: (4)..(369)

121 <223> OTHER INFORMATION: Rbx1

123 <400> SEQUENCE: 4

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124 aacatgagca acgaagtga caggatggat gttgatgaag atgaatcgca aaatattgcg 60
125 caaagctcaa accaaagtgc gccagtggaa accaaaaaga agagatttga aattaagaaa 120
126 tggaccgcag tggcgttttg gtcatgggat atagctgttg acaactgtgc tatttgcagg 180
127 aaccatataa tggaaccatg cattgaatgc cagccaaagg ccatgacgga cactgataat 240
128 gaatgtgtag cagcctgggg tgtctgtaat cacgctttcc atttgactg tattaataaa 300
129 tggatcaaga caagagacgc atgccatta gataaccaac cttggcagtt agcaagatgc 360

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130 ggtaggtgaa aaaatgaatt gcccgtaaac atttaaatca taccgaggta gaaggattat 420
131 ggcattgtcc ttttttttta gagtatgtca actggcgag tagatacatg tttttctctt 480
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135 <211> LENGTH: 504
136 <212> TYPE: DNA
137 <213> ORGANISM: Mus sp.
139 <220> FEATURE:
140 <221> NAME/KEY: CDS
141 <222> LOCATION: (18)..(344)
142 <223> OTHER INFORMATION: Rbx1
144 <400> SEQUENCE: 5
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146 gcggcgcggg caagaagcgc tttgaagtta aaaagtggaa tgcagtggcc ctctgggcct 120
147 gggacattgt ggttgataac tgtgccatct gcaggaacca cattatggat ctttgtatcg 180
148 aatgtcaggc caaccaggcg tcagctactt ccgaagagtg tacggttgca tggggagtct 240
149 gcaaccatgc ttttcatttc cactgcatct ctcgatggct caaaacgagg caggtgtgtc 300
150 cgttgacaaa cagagagtgg gagttccaga agtatgggca ttaggaaaga tttcccgcaa 360
151 gggtaccaca tctgttactt gtctagtac ttcctgttaa ttatacatta gatagaacca 420
152 tggctccttt tcgttccttt gtttttgag tttggtgttc ccgcagccat attgtatttt 480
153 gtgtaaataa agcctttaag ttgg
156 <210> SEQ ID NO: 6
157 <211> LENGTH: 108
158 <212> TYPE: PRT
159 <213> ORGANISM: Drosophila melanogaster
161 <220> FEATURE:
162 <223> OTHER INFORMATION: Drosophila melanogaster ring box protein 1 (Rbx1)
164 <400> SEQUENCE: 6
165 Met Glu Val Asp Glu Asp Gly Tyr Glu Val Pro Ser Ser Ser Ser Lys
166 1 5 10 15
168 Gly Asp Lys Lys Arg Phe Glu Val Lys Lys Trp Asn Ala Val Ala Leu
169 20 25 30
171 Trp Ala Trp Asp Ile Val Val Asp Asn Cys Ala Ile Cys Arg Asn His
172 35 40 45
174 Ile Met Asp Leu Cys Ile Glu Cys Gln Ala Asn Gln Ala Ser Ala Thr
175 50 55 60
177 Ser Glu Glu Cys Thr Val Ala Trp Gly Val Cys Asn His Ala Phe His
178 65 70 75 80
180 Phe His Cys Ile Ser Arg Trp Leu Lys Thr Arg Gln Val Cys Pro Leu
181 85 90 95
183 Asp Asn Arg Glu Trp Asp Phe Gln Lys Tyr Gly His
184 100 105
187 <210> SEQ ID NO: 7
188 <211> LENGTH: 110
189 <212> TYPE: PRT
190 <213> ORGANISM: Caenorhabditis elegans
192 <220> FEATURE:
193 <223> OTHER INFORMATION: Caenorhabditis elegans ring box protein 1 (Rbx1)
195 <400> SEQUENCE: 7
196 Met Ala Gln Ala Ser Asp Ser Thr Ala Met Glu Val Glu Glu Ala Thr

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197      1              5              10              15
199 Asn Gln Thr Val Lys Lys Arg Phe Glu Val Lys Lys Trp Ser Ala Val
200              20              25              30
202 Ala Leu Trp Ala Trp Asp Ile Gln Val Asp Asn Cys Ala Ile Cys Arg
203              35              40              45
205 Asn His Ile Met Asp Leu Cys Ile Glu Cys Gln Ala Asn Gln Ala Ala
206              50              55              60
208 Gly Leu Lys Asp Glu Cys Thr Val Ala Trp Gly Asn Cys Asn His Ala
209      65              70              75              80
211 Phe His Phe His Cys Ile Ser Arg Trp Leu Lys Thr Arg Gln Val Cys
212              85              90              95
214 Pro Leu Asp Asn Arg Glu Trp Glu Phe Gln Lys Tyr Gly His
215              100              105              110
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219 <211> LENGTH: 18
220 <212> TYPE: PRT
221 <213> ORGANISM: Saccharomyces cerevisiae
223 <220> FEATURE:
224 <223> OTHER INFORMATION: Anaphase-Promoting Complex subunit APC11 sequence
226 <400> SEQUENCE: 8
227 Met Lys Val Lys Ile Asn Glu Val His Ser Val Phe Ala Trp Ser Trp
228      1              5              10              15
230 His Ile
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235 <211> LENGTH: 69
236 <212> TYPE: PRT
237 <213> ORGANISM: Saccharomyces cerevisiae
239 <220> FEATURE:
240 <223> OTHER INFORMATION: Anaphase-Promoting Complex subunit APC11 sequence
242 <400> SEQUENCE: 9
243 Asp Glu Asp Val Cys Gly Ile Cys Arg Ala Ser Tyr Asn Gly Thr Cys
244      1              5              10              15
246 Pro Ser Cys Lys Phe Pro Gly Asp Gln Cys Pro Leu Val Ile Gly Leu
247              20              25              30
249 Cys His His Asn Phe His Asp His Cys Ile Tyr Arg Trp Leu Asp Thr
250              35              40              45
252 Pro Thr Ser Lys Gly Leu Cys Pro Met Cys Arg Gln Thr Phe Gln Leu
253              50              55              60
255 Gln Lys Gly Leu Ala
256      65
259 <210> SEQ ID NO: 10
260 <211> LENGTH: 13
261 <212> TYPE: PRT
262 <213> ORGANISM: Artificial Sequence
264 <220> FEATURE:
265 <223> OTHER INFORMATION: Description of Artificial Sequence: von
266 Hippel-Lindau (VHL) tumor suppressor complex
267 tryptic peptide
269 <400> SEQUENCE: 10

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271 1 5 10
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275 <211> LENGTH: 14
276 <212> TYPE: PRT
277 <213> ORGANISM: Artificial Sequence
279 <220> FEATURE:
280 <223> OTHER INFORMATION: Description of Artificial Sequence: von
281 Hippel-Lindau (VHL) tumor suppressor complex
282 tryptic peptide
284 <400> SEQUENCE: 11
285 Gln Val Cys Pro Leu Asp Asn Arg Glu Trp Glu Phe Gln Lys
286 1 5 10
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291 <212> TYPE: PRT
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294 <220> FEATURE:
295 <223> OTHER INFORMATION: Description of Artificial Sequence: von
296 Hippel-Lindau (VHL) tumor suppressor complex
297 tryptic peptide
299 <400> SEQUENCE: 12
300 Trp Asn Ala Val Ala Leu
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VERIFICATION SUMMARY

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L:14 M:271 C: Current Filing Date differs, Replaced Current Filing Date